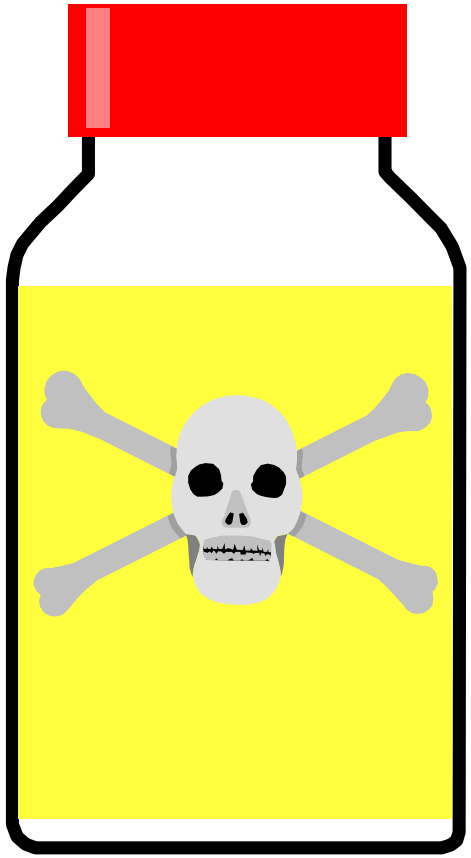
USMC HAZMAT CONTROL AND MANAGEMENT



HAZMAT POINTS OF CONTACT

- NAVSAFECEN ENVIRONMENTAL HEALTH DIVISION (LT BOBICH)
- DSN 564-3520 X 7151
- COMM (757) 444-3520 X 7151

HAZMAT POINT OF CONTACT

- NAVSAFECEN ENVIRONMENTAL HEALTH (CHUCK ALMOND)
- DSN 564-3520 X 7157
- COMM (757) 444-3520 X 7157

HAZMAT REFERENCES

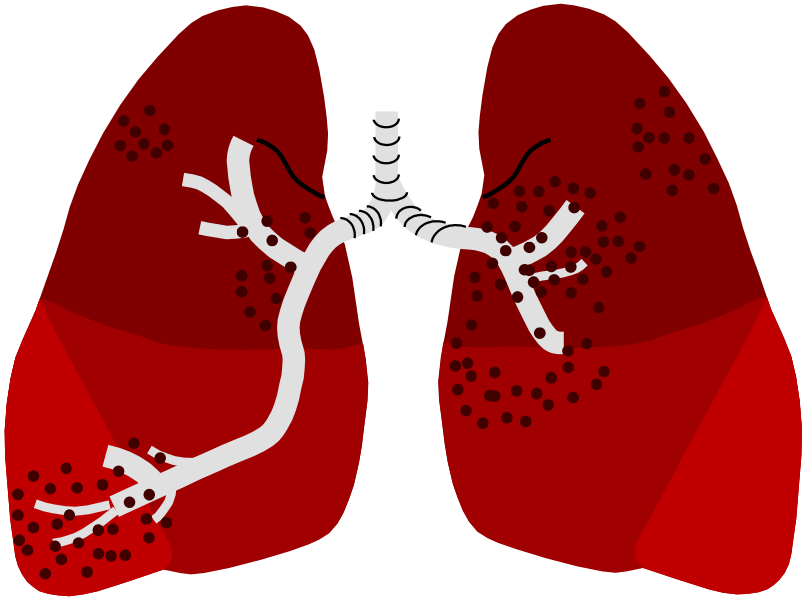
- 29 CFR 1910.1200
- MCO 4450-12
- LOCAL STATION ORDER

DEFINITION OF A HAZARDOUS MATERIAL

ANY MATERIAL WHICH BECAUSE OF ITS QUANTITY, CONCENTRATION, PHYSICAL OR INFECTIOUS CHARACTERISTICS MAY POSE A SUBSTANTIAL ***HEALTH HAZARD*** TO HUMANS OR THE ENVIRONMENT WHEN RELEASED OR SPILLED

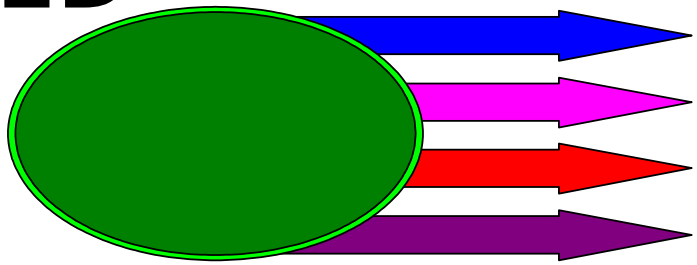
HEALTH HAZARD

- HEALTH HAZARDS ARE THOSE WHICH MAY CAUSE MEASURABLE CHANGES IN THE BODY SUCH AS DECREASED PULMONARY FUNCTION



HEALTH HAZARD

HEALTH HAZARDS ARE LISTED IN TWO BROAD CATEGORIES



- **ACUTE**

and

- **CHRONIC**

ACUTE

ACUTE EFFECTS MAY OCCUR RAPIDLY AS A RESULT OF “SHORT TERM” EXPOSURE

CHRONIC

CHRONIC EFFECTS GENERALLY OCCUR AS A RESULT OF “LONG TERM” EXPOSURE

HEALTH HAZARD

- In addition to the aforementioned definition of ACUTE and CHRONIC the following pages also fall into the category of HEALTH HAZARD

CARCINOGEN

A carcinogen is a chemical that causes cancer in humans or has the potential to cause cancer (found causes cancer in laboratory animals)

CORROSIVE

A corrosive chemical is one that causes visible destruction of or IRREVISBLE alterations in living tissue by chemical action at the site of contact

HIGHLY TOXIC

A chemical which has the median lethal dose of:

- 50 mg per kg when administered orally
- 200 mg per kg by continuous contact for 24 hrs

A chemical which has the median lethal concentration of:

- 200 parts per mil of gas or vapor or 2 mg per L of mist, fume or dust when continuously inhaled for one hour

IN THE ABOVE DESCRIPTIONS DEATH OCCURS WITHIN THE TIME FRAME DESCRIBED IN LABORATORY ANIMALS

IRRITANT

An irritant chemical is one which is not corrosive but which causes a REVERSIBLE inflammatory effect on living tissue by chemical action at the site of contact

SENSITIZER

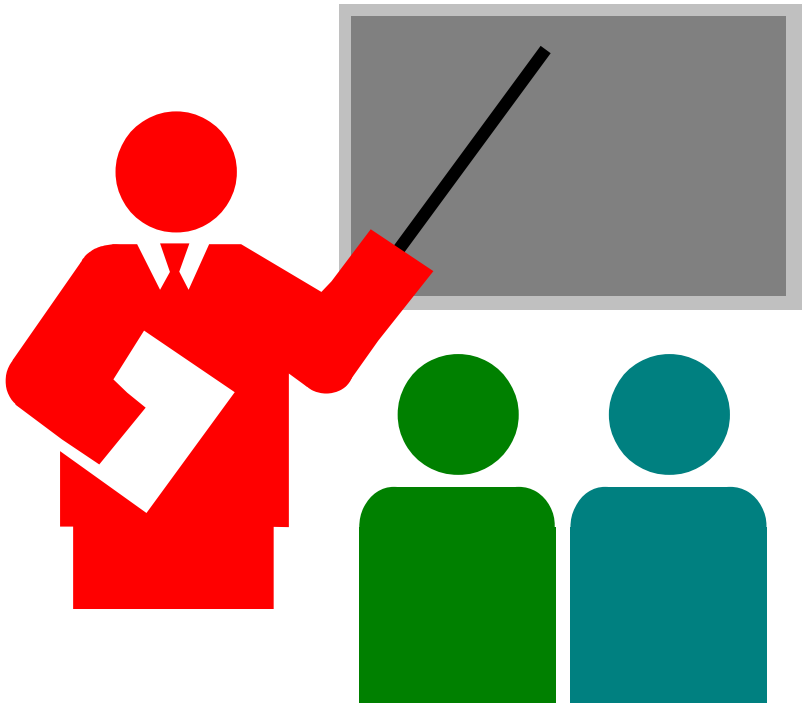
A chemical which causes a substantial portion of exposed people to develop an allergic reaction in normal tissue after repeated exposure to the chemical

DEFINITION OF A HAZARDOUS WASTE

ANY HAZARDOUS LIQUID, SOLID OR GASEOUS MATERIAL WHICH IS NO LONGER USABLE FOR ITS ORIGINAL INTENDED PURPOSE OR WHICH HAS BEEN CONTAMINATED BY A FOREIGN SUBSTANCE.

HAZARD COMMUNICATION PROGRAM

ALL EMPLOYERS SHALL PROVIDE INFORMATION TO THEIR EMPLOYEES ON HAZARDOUS CHEMICALS TO WHICH THEY ARE EXPOSED BY MEANS OF:



HAZARD COMMUNICATION PROGRAM

Labels and other forms of warning

- Material Safety Data Sheets
- Training
- Providing employees with a list of the hazardous chemicals in the workplace
- Informing employees of non-routine tasks
- Informing other employees and contractors

Purpose of HazCom Program

- IDENTIFY AND EVALUATE HAZARDS IN THE WORKPLACE
- COMMUNICATE INFORMATION TO EMPLOYEES

Application of HazCom Program

- THIS APPLIES TO CHEMICAL MANUFACTURERS
- ALL EMPLOYERS WITH 10 OR MORE EMPLOYEES
- ALL DISTRIBUTORS

WRITTEN HAZCOM PROGRAM MUST INCLUDE:

- LABELS AND OTHER FORMS OF WARNING

Labels

CHECK ALL LABELS, THEY SHALL INCLUDE THE FOLLOWING INFORMATION:

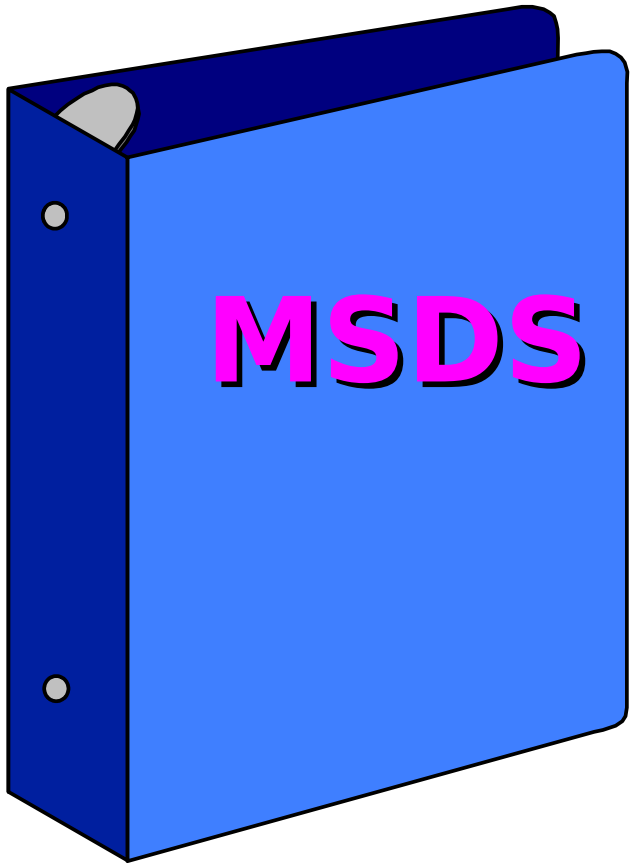
1. **NAME & ADDRESS OF CHEMICAL MANUFACTURER OR DISTRIBUTOR**

2. **IDENTITY OF HAZARDOUS CHEMICALS AS PER SARA TITLE 313**

3. **APPROPRIATE HAZARD WARNINGS:**
   DANGER, WARNING, CAUTION

PROGRAM MUST INCLUDE:

- MATERIAL SAFETY DATA SHEETS (MSDSs)



MSDSs

MSDS CAN BE OBTAINED FROM:

- **STATION SAFETY**
- **SUPPLY**
- **MANUFACTURER**

EMPLOYERS SHALL HAVE ACCESS TO THE MSDS FOR HAZARDOUS CHEMICALS WHICH THEY USE

MSDS

- The MSDS shall be unique to the chemical and manufacturer’s name
- The MSDS must be available and accessible to employees during each workshift. The MSDSs may be kept in a central location at the primary workplace

HAZMAT TRAINING

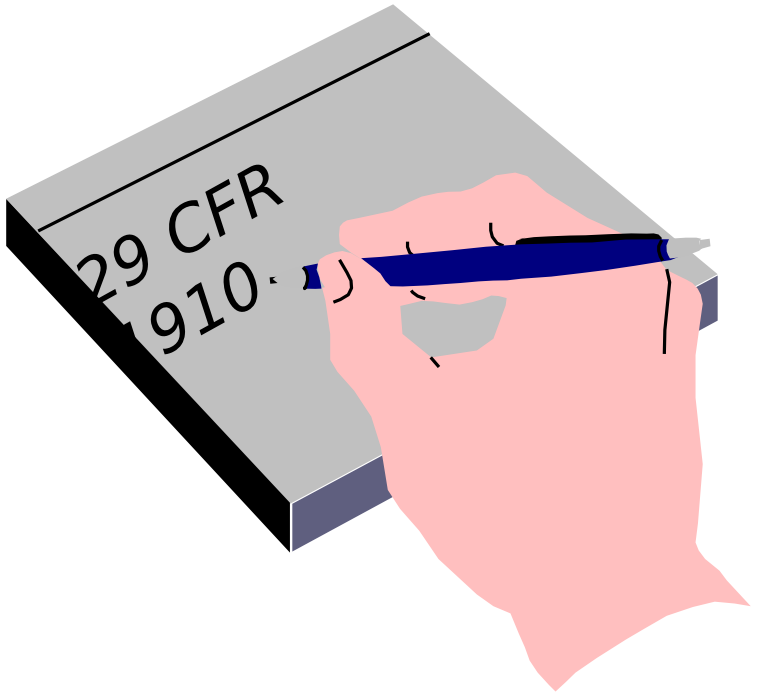
INVOLVES THE PROCUREMENT, LABELING, ISSUING, STORAGE, HANDLING AND TRAINING FOR ALL HM WITHIN AN ACTIVITY

HAZMAT PROCUREMENT

- TO PREVENT EXCESS ACCUMULATION AND SHELF LIFE EXPIRATION, DO NOT ORDER MORE THAN IS NEEDED FOR THE JOB TASK!

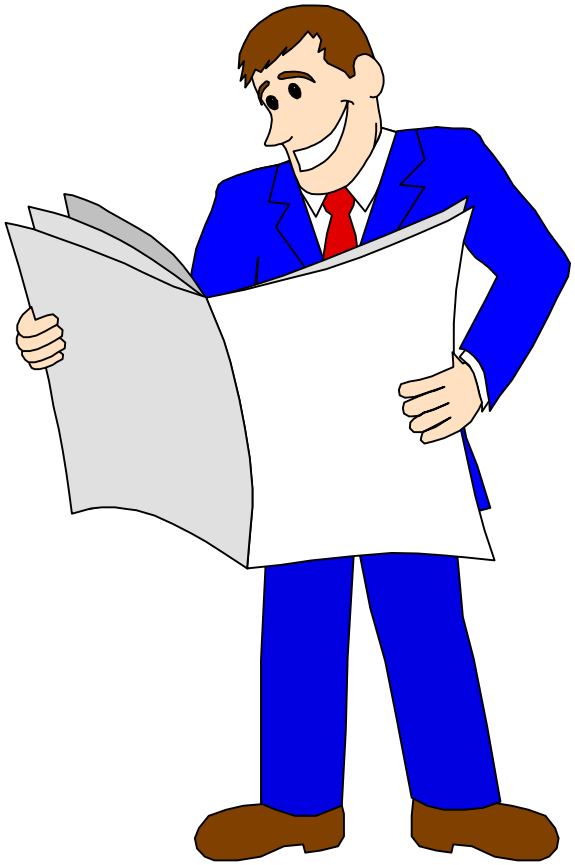
HAZMAT TRAINING

APPROVAL FOR ALL
HM BY STATION
SAFETY BEFORE
PURCHASING
OR ADDING TO
HM INVENTORY



HAZMAT INVENTORY

- Provide employees with an inventory of chemicals known to be present in the workplace, using an identity that is referenced on the appropriate MSDS



INFORMING OTHERS

IF CONTRACTORS ARE WORKING IN YOUR FACILITY, THEY WILL BE PROVIDED WITH AN INVENTORY OF HAZMAT THEY MAY BE EXPOSED AND THEY ALSO MUST INFORM YOU OF THE HAZMAT THEY WILL BE USING

HAZMAT TRAINING

IF HM IS REQUIRED:

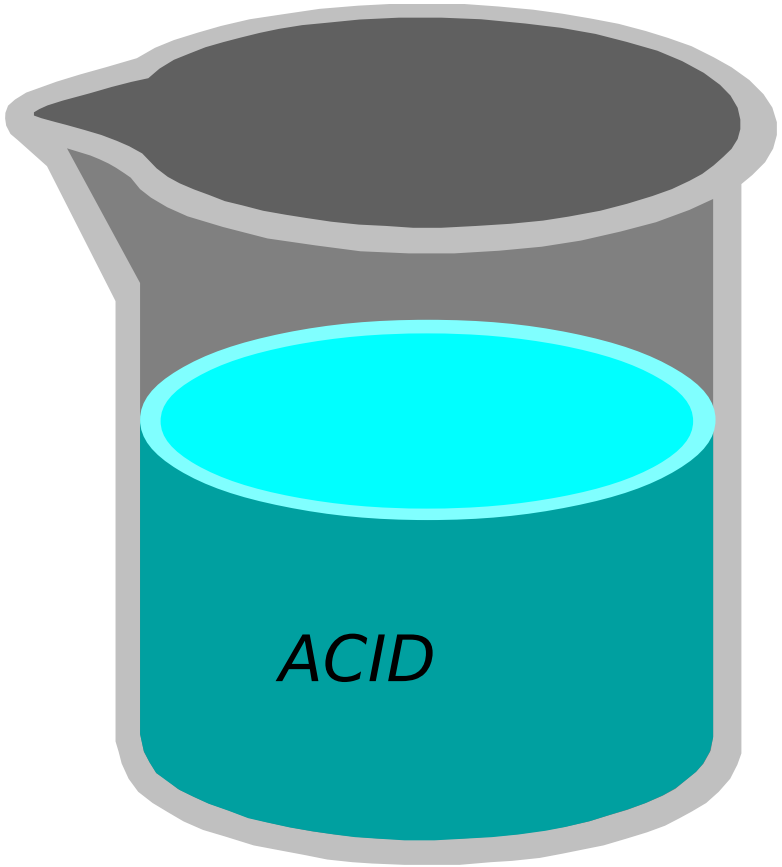
- ADEQUATE ENGINEERING MEASURES WILL BE USED.
- ADMIN MEASURES SECOND CHOICE
- PPE LAST CHOICE

NON-ROUTINE TASKS

INFORM EMPLOYEES OF ANY HAZMAT THAT THEY MAY BE EXPOSED IN AN NEW NON-ROUTINE TASK

STORAGE OF HAZMAT

STORAGE



ACIDS, CAUSTICS AND CORROSIVES *SHALL NOT* BE STORED WITH ANY OTHER MATERIALS. IT SHALL BE SEG-REGATED AND STORED ALONE.

FLAMMABLE LIQUID

ANY LIQUID HAVING A FLASHPOINT BELOW 100 deg F EXCEPT ANY MIXTURE HAVING COMPONENTS WITH FLASHPOINTS OF 100 deg F OR HIGHER, THE TOTAL OF WHICH MAKE UP 99 PERCENT OR MORE OF THE TOTAL VOLUME OF THE MIXTURE

STORAGE

ALL FLAMMABLE LIQUIDS WILL BE STORED IN AN APPROVED FLAM LOCKER

STORAGE (CONT)

- Flammable storage lockers shall comply with 29 CFR 1910.106
- No more than three lockers may be stored within the same 100 feet on the interior of a building
- A fire extinguisher must be located within 50 feet of the flammable storage locker

COMBUSTIBLE LIQUIDS

ANY LIQUID HAVING A FLASHPOINT AT OR ABOVE 100 deg F BUT BELOW 200 deg F EXCEPT ANY MIXTURE HAVING COMPONENTS WITH FLASHPOINTS OF 200 deg F OR HIGHER, THE TOTAL OF WHICH MAKE UP 99 PERCENT OR MORE OF THE TOTAL VOLUME OF THE MIXTURE

DETERMINING THE HAZARDS

INDUSTRIAL HYGIENE SURVEYS ARE CONDUCTED AND THE FOLLOWING IS CONDUCTED:

INDUSTRIAL HYGIENE SURVEY

- TASK ANALYSIS (SAMPLING FOR HM AND NOISE)
- EXPOSURE LEVELS (PEL'S)
- CHEMICAL IDENTIFICATION
- ENGINEERING AND PPE REQUIREMENTS

SUPERVISOR TRAINING RESPONSIBILITIES

- ***ATTEND HM TRAINING***

TRAIN ALL PERSONNEL BEFORE THEIR INITIAL ASSIGNMENT & WHENEVER A NEW HM IS INTRODUCED INTO THEIR WORK AREA

SUPERVISOR TRAINING RESPONSIBILITIES

TRAIN PERSONNEL HOW TO:

- *IDENTIFY HM HAZARDS*
- *RECOGNIZE PHYSICAL & HEALTH HAZARDS IN WORK AREA*
- *OBTAIN & USE MSDS*

DOCUMENT TRAINING!!!